IN THE CLAIMS

Per the revised amendment practice, a complete listing of all claims in the application follows.

Claims 1-40 (Canceled).

41. (Previously presented) A plasma processing system, comprising:

a first chamber configured to generate a first plasma therein; and

a second chamber coupled to said first chamber, wherein said second chamber is configured to initially generate a second plasma therein, further configured to lose an ability to generate said second plasma, and configured to receive said first plasma, wherein said first plasma is configured to restore said ability.

42. (Previously presented) The system in claim 41, wherein said second chamber is configured to lose said ability in response to a generation of said second plasma, and further configured to regain said ability in response to a reception of said first plasma.

43. (Previously presented) The system in claim 42, wherein said second chamber is a tube furnace.

44. (Previously presented) The system in claim 43, wherein said first chamber is a tube furnace.

45. (Previously presented) A furnace assembly, comprising:

a structure defining a furnace interior, wherein at least a part of said structure is transparent to a radio-frequency wave, wherein said structure is configured to receive a first material that is opaque to said wave, and wherein said structure is configured to interpose between a source of said wave and said first material; and

a delivery system in fluid communication with said interior defined by said structure, said system configured to deliver a second material to said first material, wherein said second material is reactable with said first material.

46. (Previously presented) The furnace assembly in claim 45, wherein said delivery system is configured to deliver an etchant.

47. (Currently amended) The furnace assembly in claim 46, wherein said delivery system is configured to deliver a second material selected from a group ~~comprising~~ consisting of fluorine, chlorine, bromine, hydrogen chloride, hydrogen fluoride, hydrogen bromide, ~~sulphur~~ sulfur hexafluoride, nitrogen trifluoride, carbon tetrachloride (CCl_4), carbon tetrafluoride (CF_4), chlorine monofluoride (ClF), chlorine trifluoride (ClF_3), bromine chloride (BrCl), bromine monofluoride (BrF), bromine trifluoride (BrF_3), bromine pentafluoride (BrF_5), iodine monobromide (IBr), iodine tribromide (IBr_3), iodine monochloride (ICl; alpha and beta), iodine trichloride (ICl_3), iodine pentafluoride (IF_5), iodine heptafluoride (IF_7), carbon dichlorodifluoride (CCl_2F_2), and NF_3.

48. (Previously presented) The furnace assembly in claim 46, wherein said delivery system is configured to deliver a halogen.

49. (Previously presented) The furnace assembly in claim 48, wherein said delivery system is configured to deliver a polyhalogen.

50. (Previously presented) A semiconductor fabrication system, comprising:

a first reaction device configured to inductively generate a first plasma, wherein said first plasma comprises an induction blocker, and wherein said first reaction device is further configured to accept said induction blocker in an area that blocks plasma induction; and

a component coupled to said first reaction device and configured to provide said first reaction device with an induction blocker remover.

51. (Previously presented) The semiconductor fabrication system in claim 50, wherein said component is a second reaction device configured to generate a second plasma comprising said induction blocker remover.

52. (Previously presented) The semiconductor fabrication system in claim 51, wherein said first reaction device comprises a quartz component having an interior defining a plasma induction region; and wherein said quartz component is configured to accept said induction blocker thereon.

53. (Previously presented) The semiconductor fabrication system in claim 52, wherein said second reaction device is configured to generate a second plasma comprising a conductive material remover.

54. (Previously presented) A cleaning apparatus for an inductively-coupled plasma chamber, comprising:

a conduit configured to couple to said inductively-coupled plasma chamber; and

a cleaning chamber coupled to said conduit and configured to provide a metal-cleaning gas to said inductively-coupled plasma chamber through said conduit.

55. (Previously presented) The cleaning apparatus of claim 54, further comprising a plasma-generation device around said cleaning chamber, wherein said plasma-generation device is configured to inductively generate a metal-etching plasma within said cleaning chamber.

56. (Previously presented) The cleaning apparatus in claim 55, wherein said cleaning chamber is configured to provide said metal-etching plasma to said inductively-coupled plasma chamber through said conduit.

57. (Previously presented) A wafer processing system, comprising:

a reactor having a wafer fabrication mode and a reactor cleaning mode, wherein said reactor is configured to receive a metal-containing gas during said wafer fabrication mode, locally generate a plasma during said wafer fabrication mode, receive a metal etchant during said reactor cleaning mode, and refrain from locally generating a plasma during said reactor cleaning mode; and

a chamber configured to couple to said reactor during said reactor cleaning mode and further configured to temporarily house said metal etchant.

58. (Previously presented) The system in claim 57, wherein an interior of said reactor is free of any wafer during said reactor cleaning mode.

59. (Previously presented) The system in claim 58, wherein said chamber is configured to transmit said metal etchant in a non-plasma form to said reactor during said cleaning mode.

60. (Previously presented) A metal processing system, comprising:

a furnace comprising a quartz tube and configured to house a high-density plasma and to allow deposition of a metal on said quartz tube and on a wafer located inside said quartz tube; and

a cleaning chamber coupled to said furnace and configured to house a gas that is configured to etch said metal from said quartz tube.

61. (Previously presented) The system in claim 60, wherein said furnace is configured to allow said gas to access said quartz tube to the exclusion of said wafer.

62. (Previously presented) The system in claim 61, wherein said furnace is configured to allow said gas to access said quartz tube in response to a removal of said wafer from said furnace.

63. (Previously presented) A plasma-generation system, comprising:

a first plasma chamber;

a second plasma chamber having a deposition mode and a cleaning mode, wherein said second plasma chamber comprises:

a housing defining a process area and coupled to said first plasma chamber, and

a plasma inducer around said housing; and

a conductive material present after said deposition mode between said process area and said inducer.

64. (Previously presented) The system in claim 63, wherein said conductive material is between said process area and said housing.

65. (Previously presented) The system in claim 64, wherein said conductive material is absent after said cleaning mode.

66. (Previously presented) The system in claim 65, wherein said conductive material is absent before said deposition mode.

67. (Previously presented) A furnace assembly, comprising:

a first material that is opaque to a type of energy;

a structure defining a furnace interior, wherein at least a part of said structure is transparent to said energy, wherein said part contacts said first material, and wherein said structure is configured to interpose between a source of said energy and said first material; and

a plasma delivery system in fluid communication with said interior defined by said structure.

68. (Previously presented) The assembly in claim 67, wherein said first material is present before said plasma delivery system is active.

69. (Previously presented) The assembly in claim 68, wherein said first material is opaque to a radio-frequency wave.